

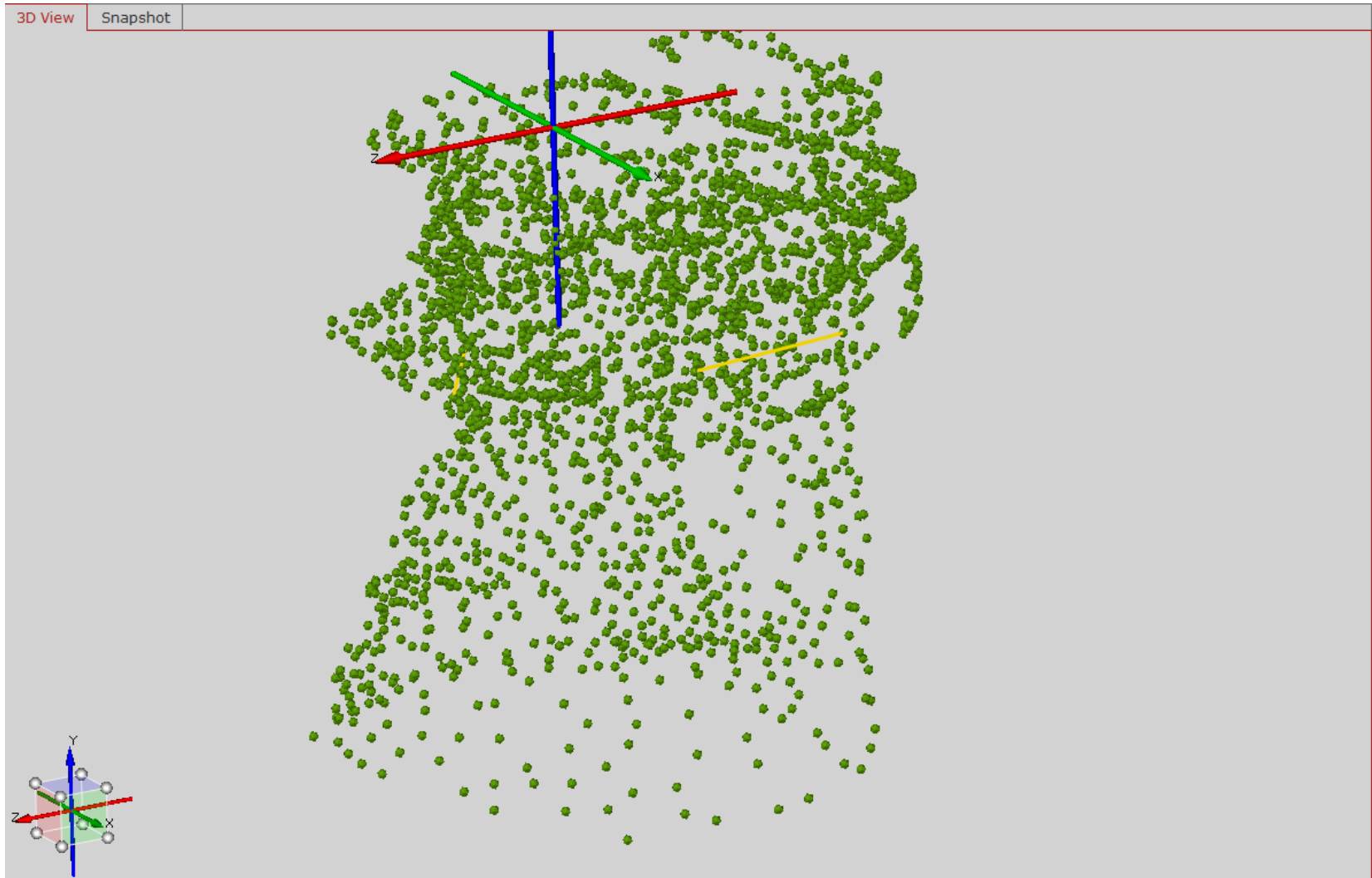
Resurrecting the F-1 – 3D Scanning to Digitally Capture the Saturn V Main Engine



Complete F-1 Engine



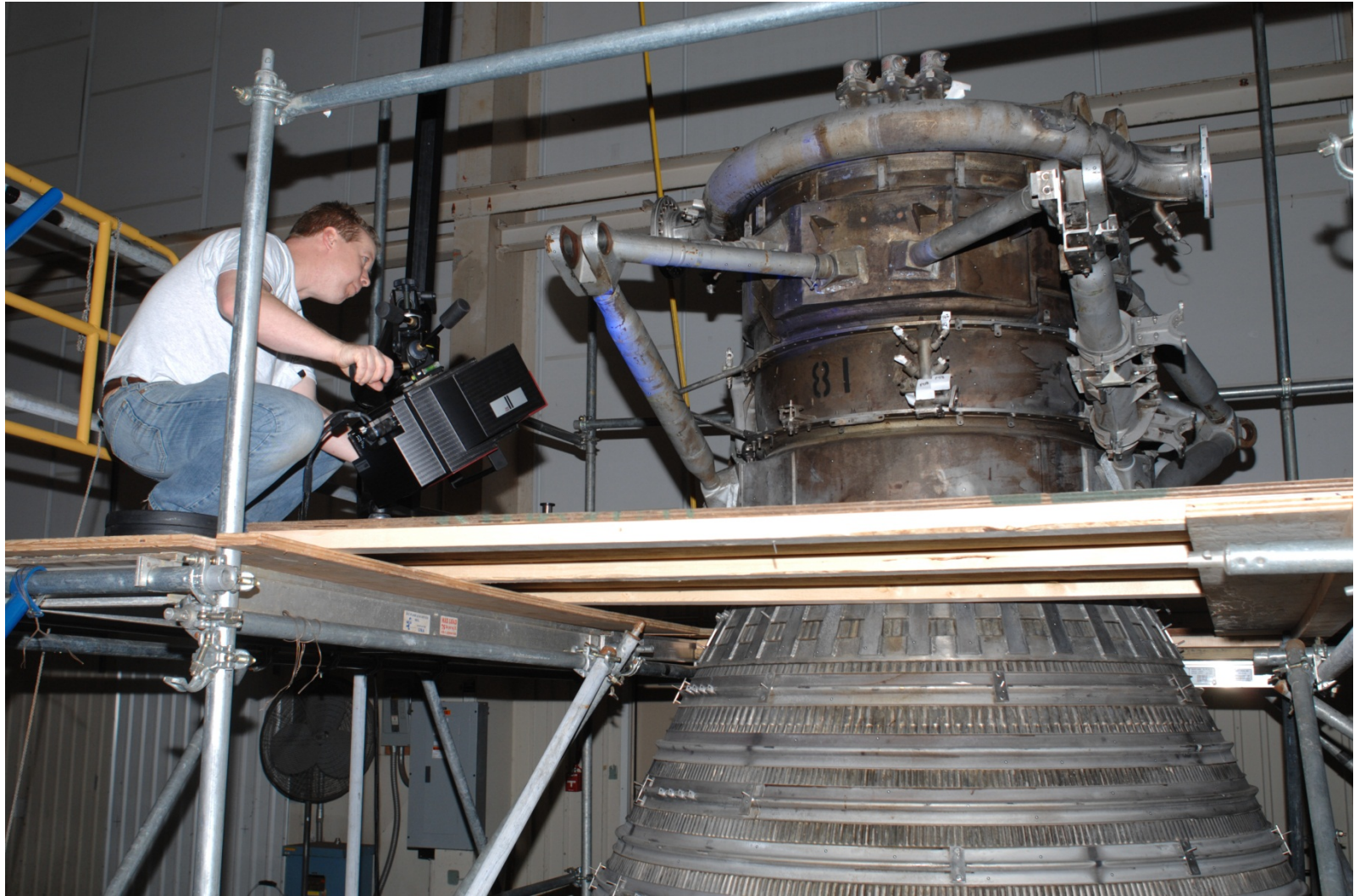
Assembly Photogrammetry Definition



Assembly Photogrammetry Result



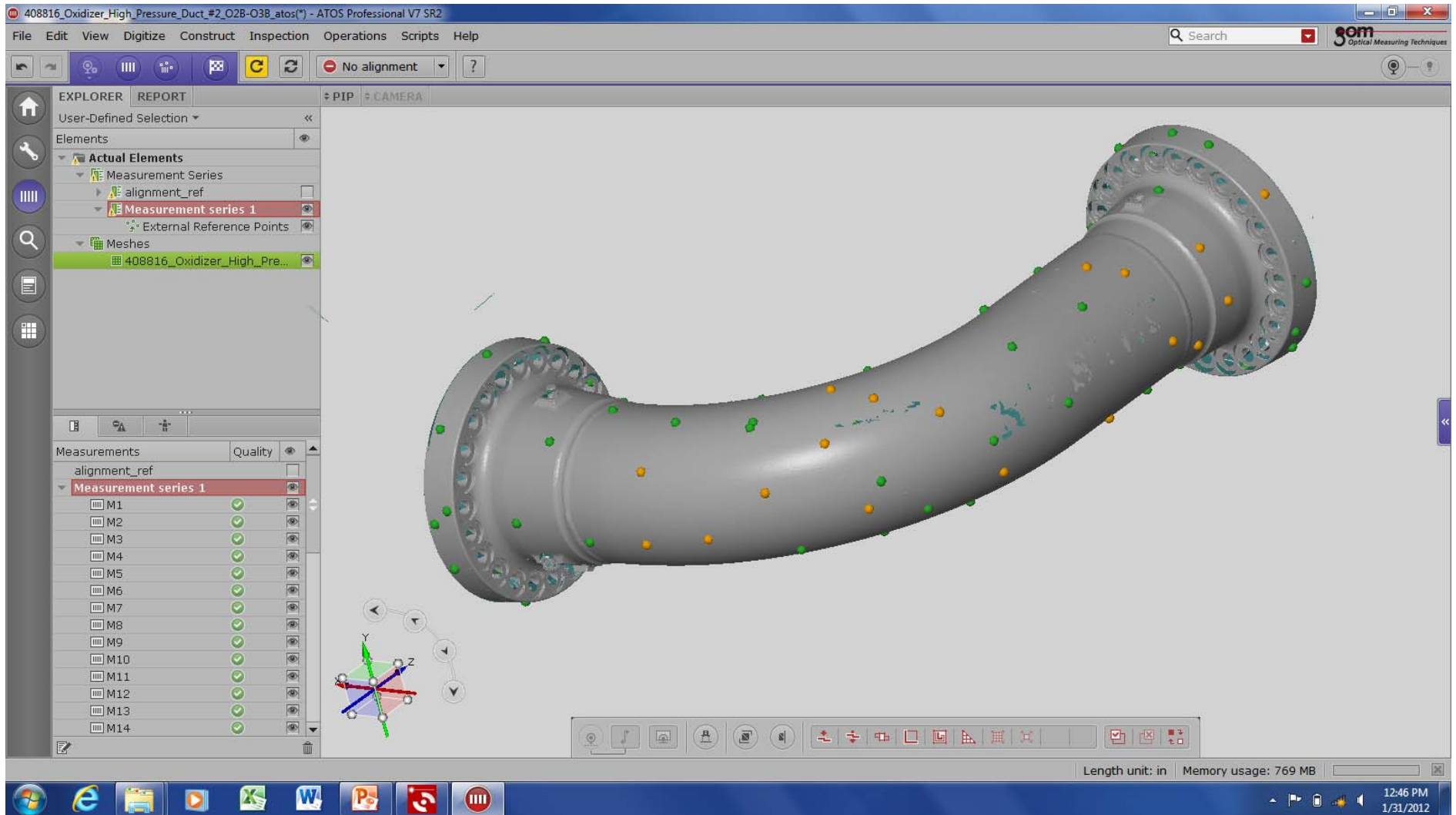
Disassembly



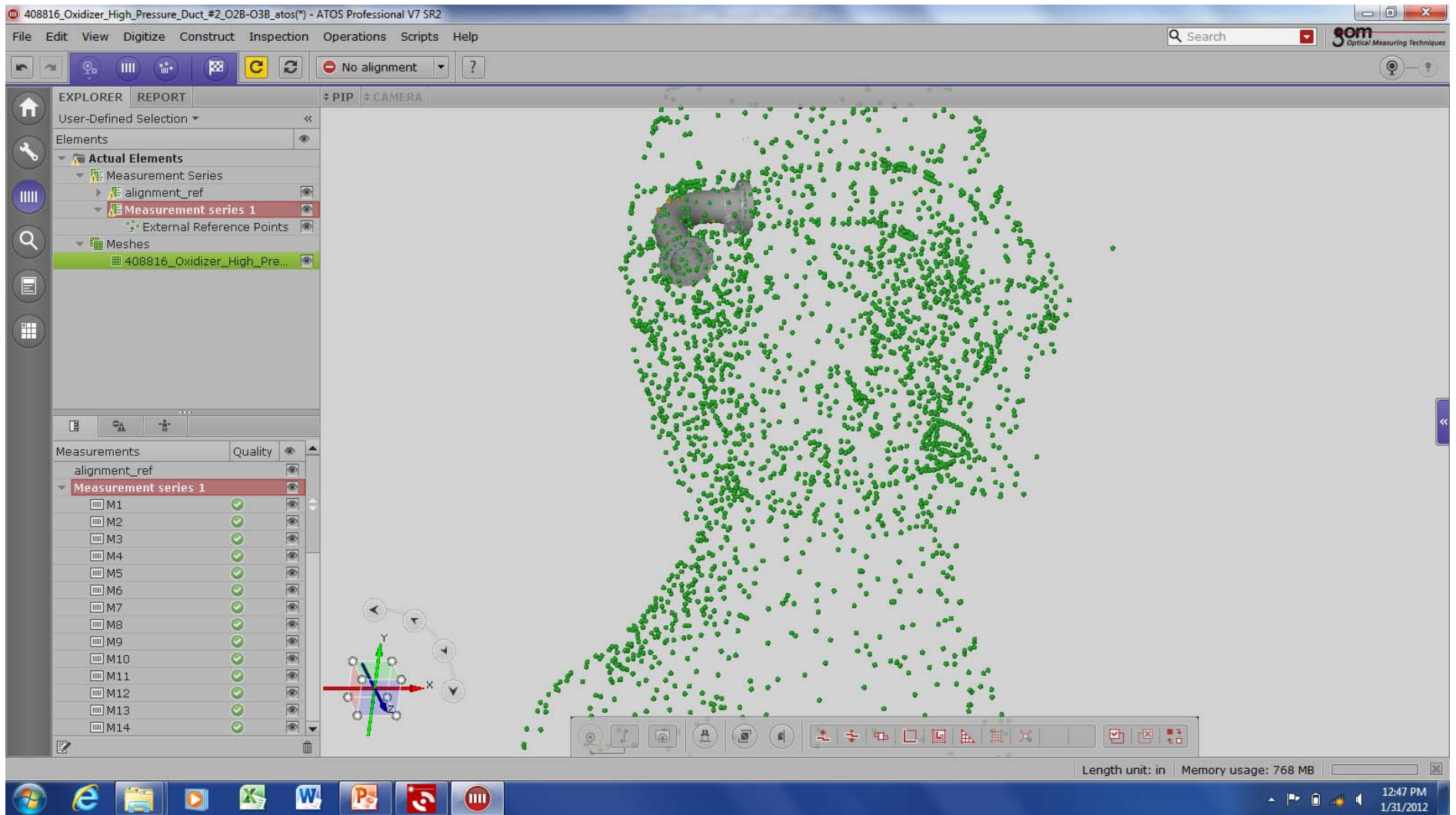
Component Scanning



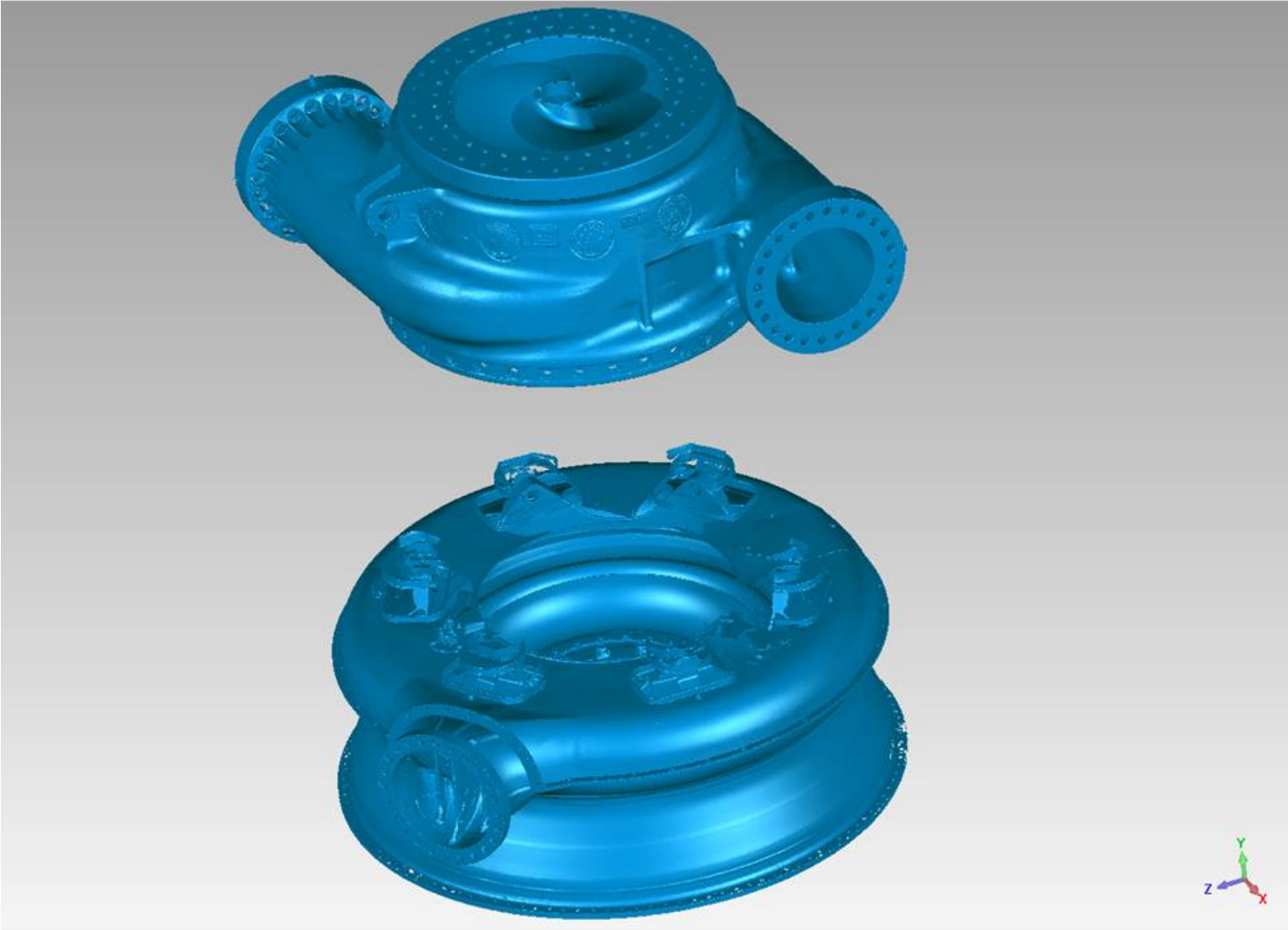
Component Scanning

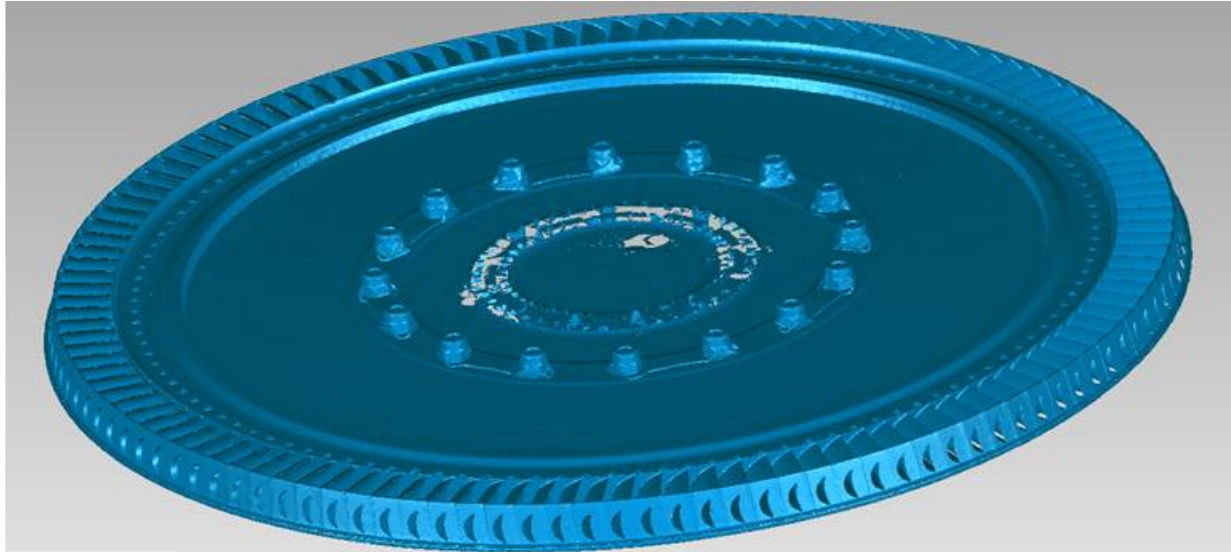


Component Scanning Results

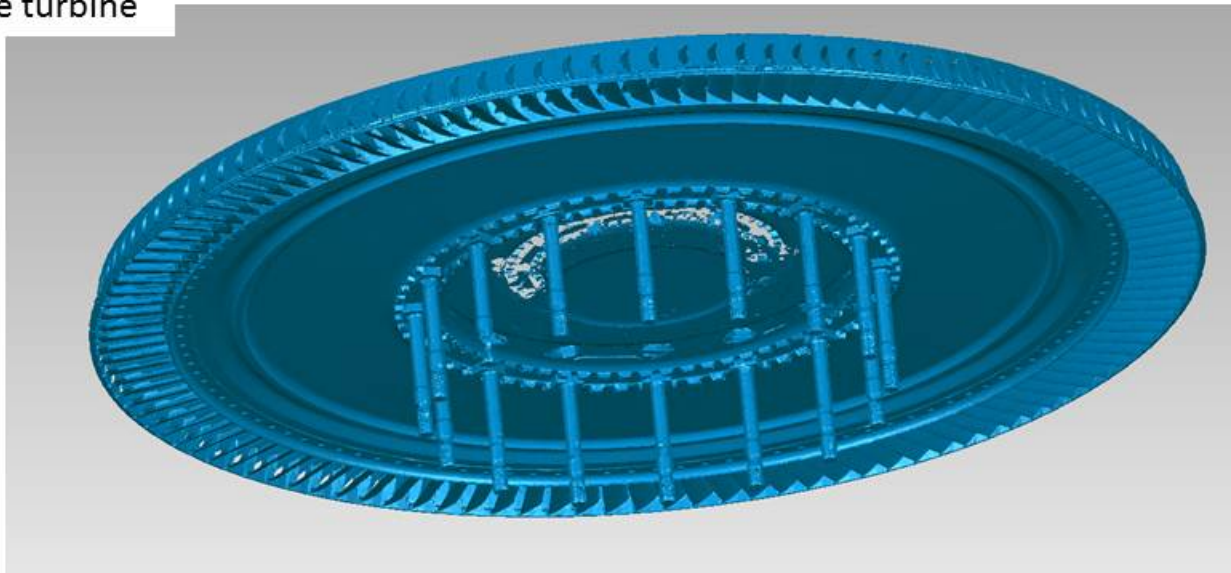


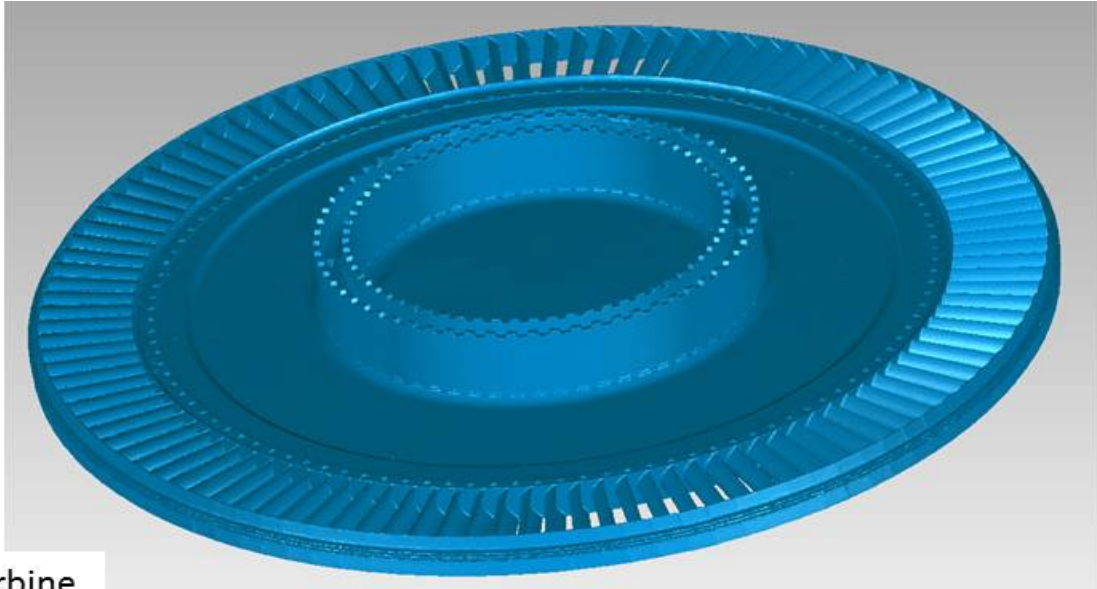
Component Assembly Definition



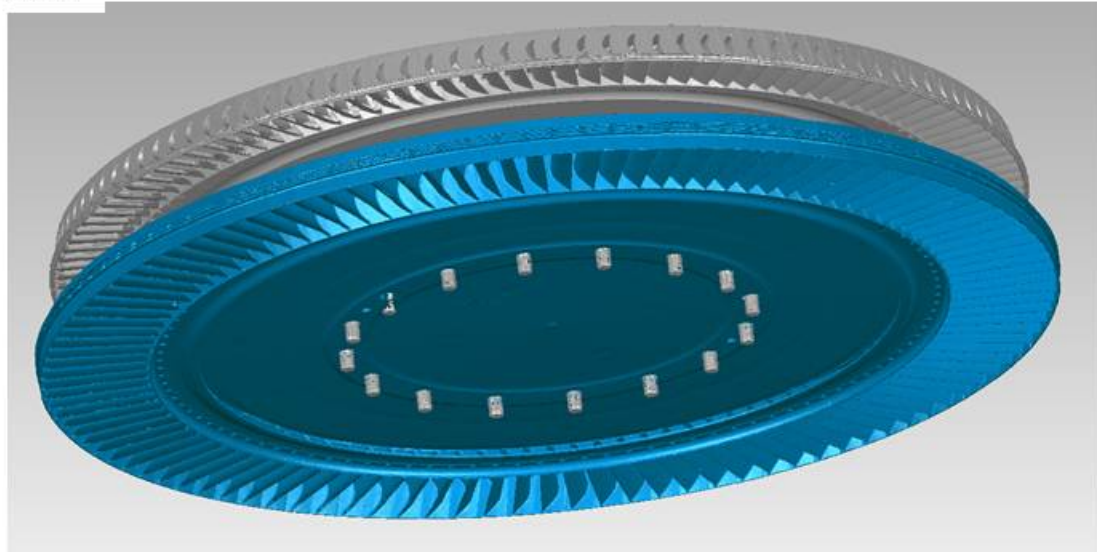


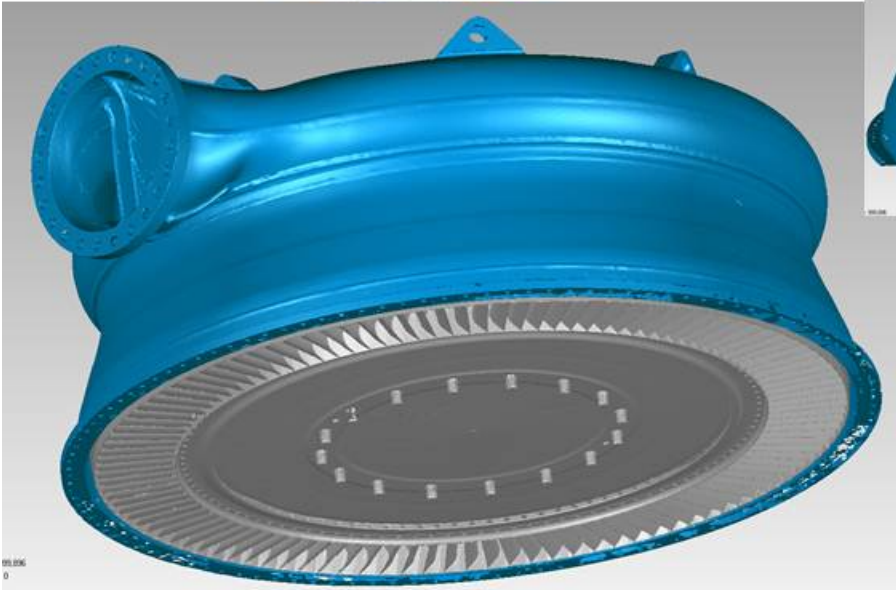
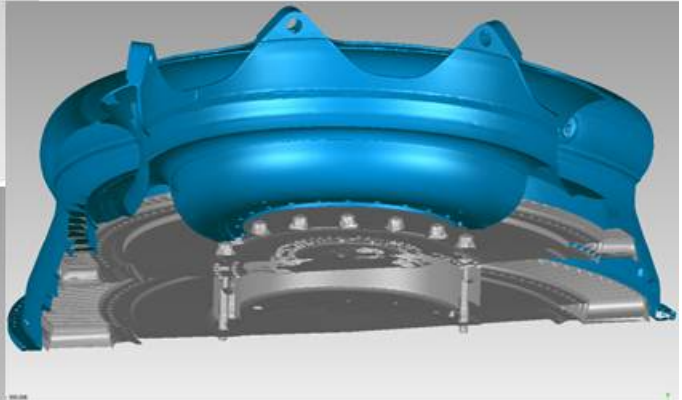
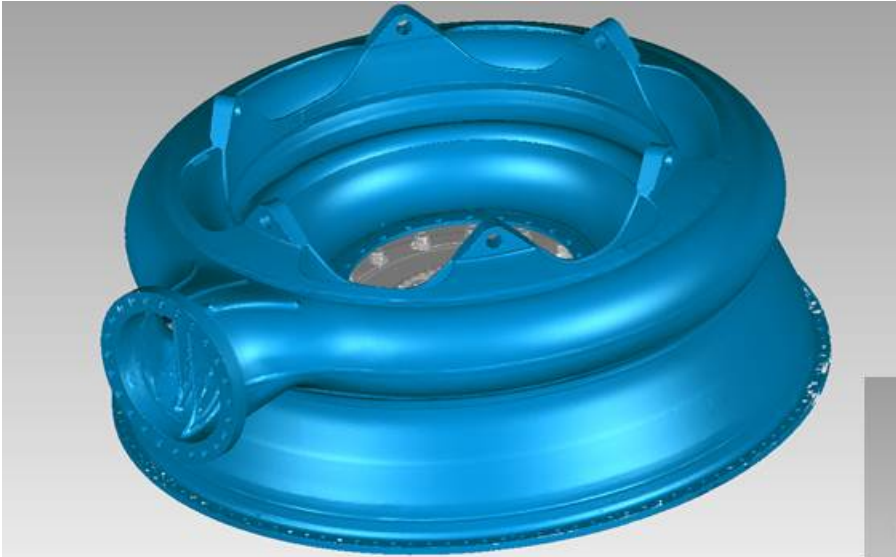
1st stage turbine



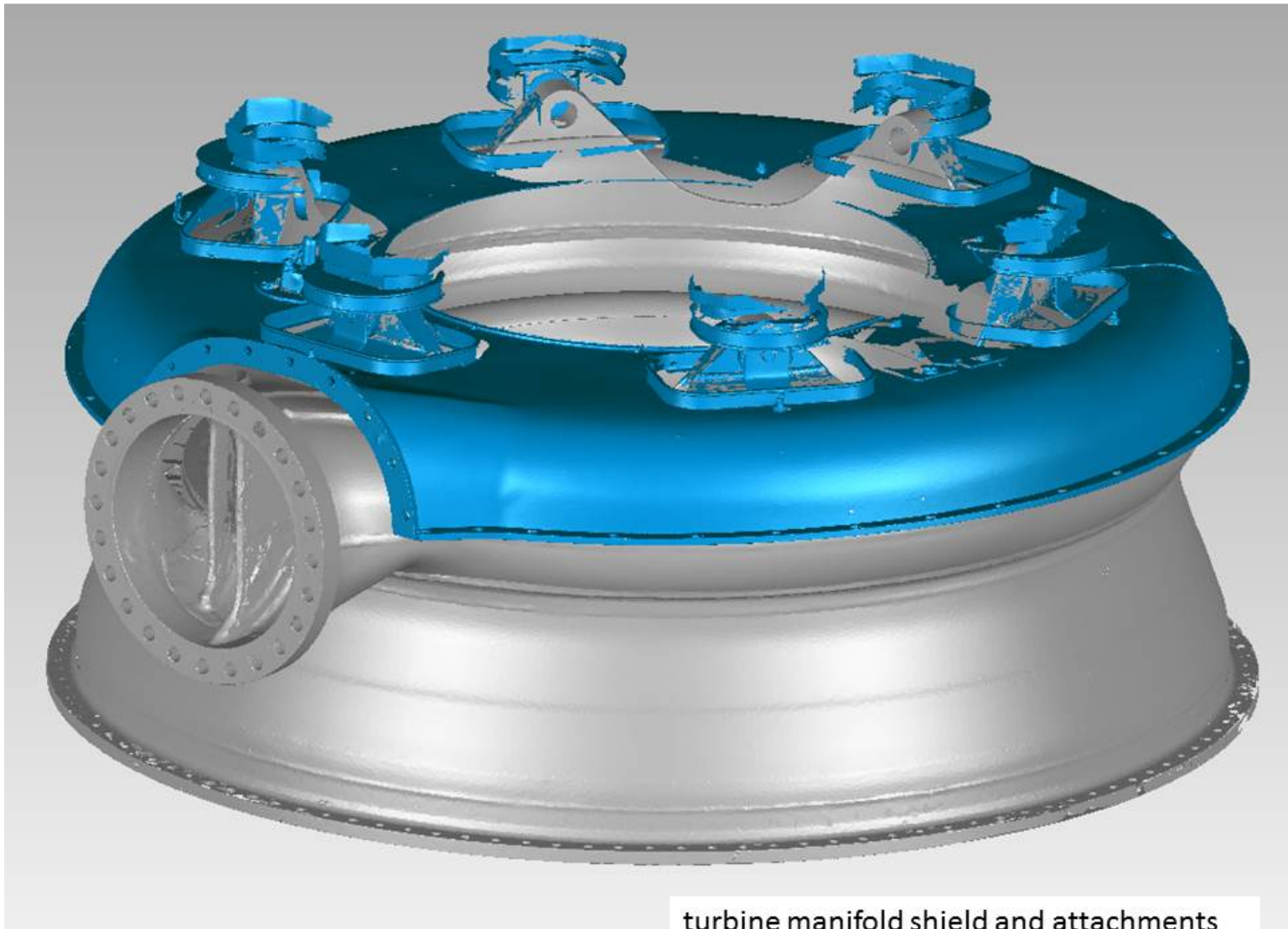


2nd stage turbine

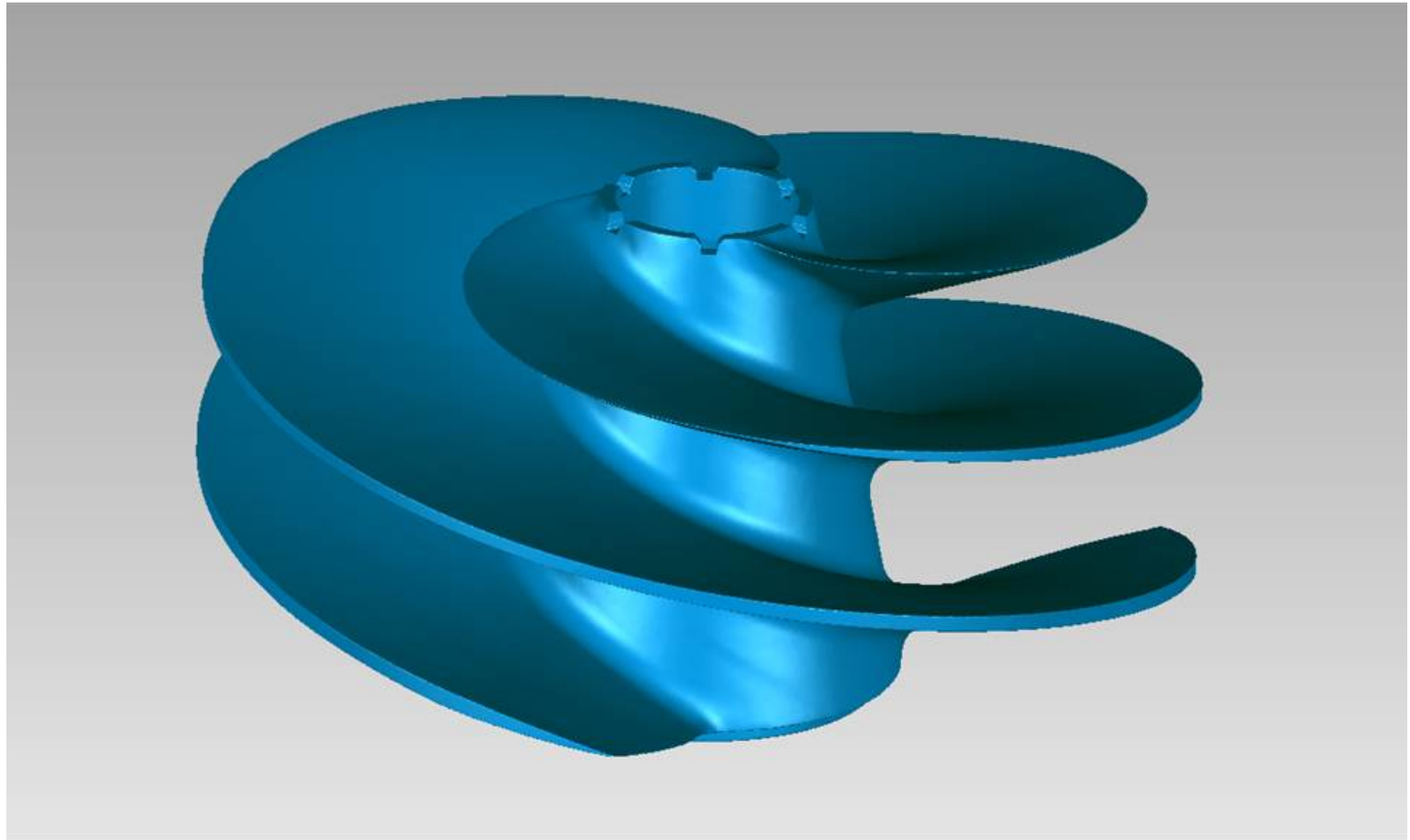




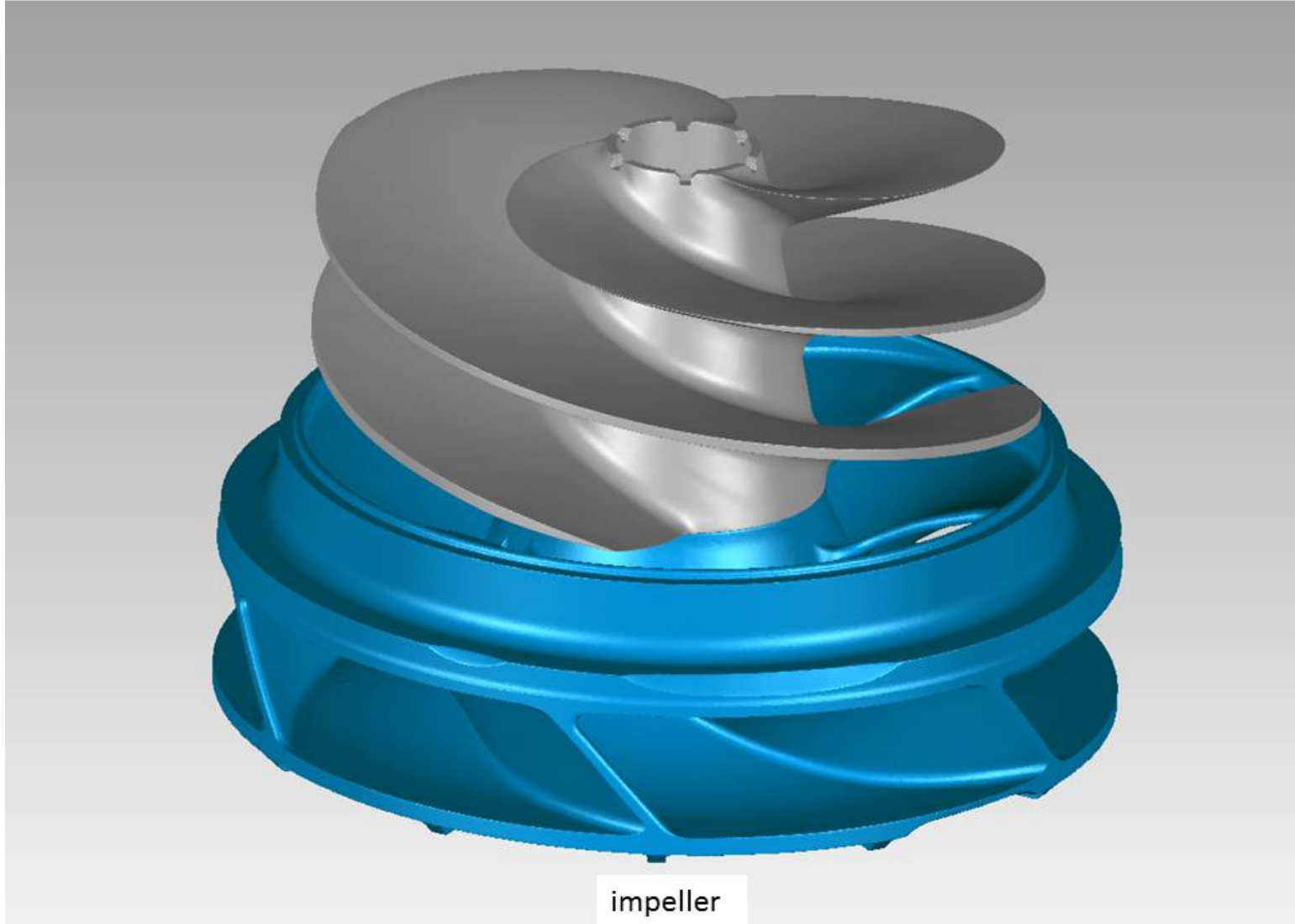
turbine manifold



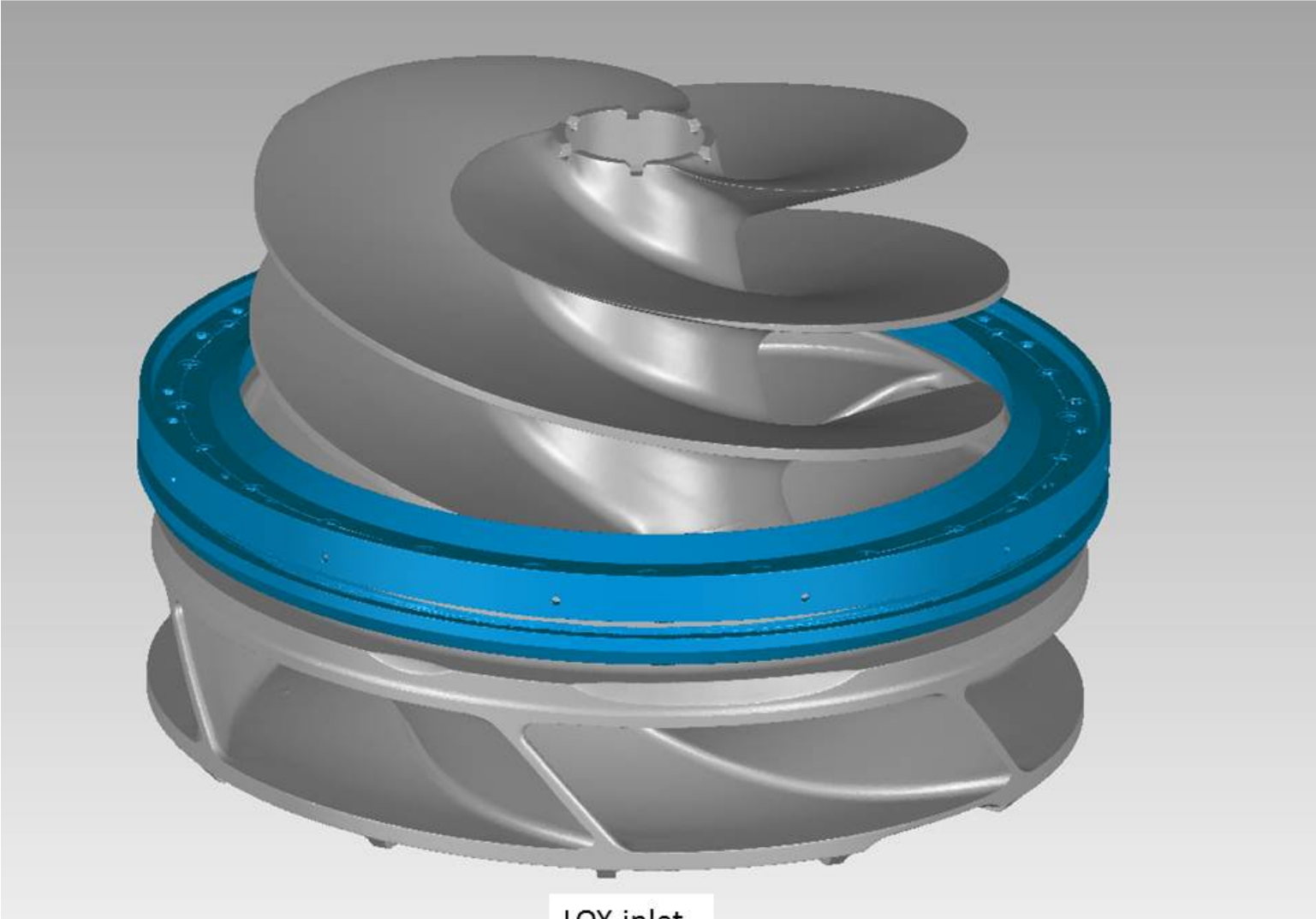
turbine manifold shield and attachments



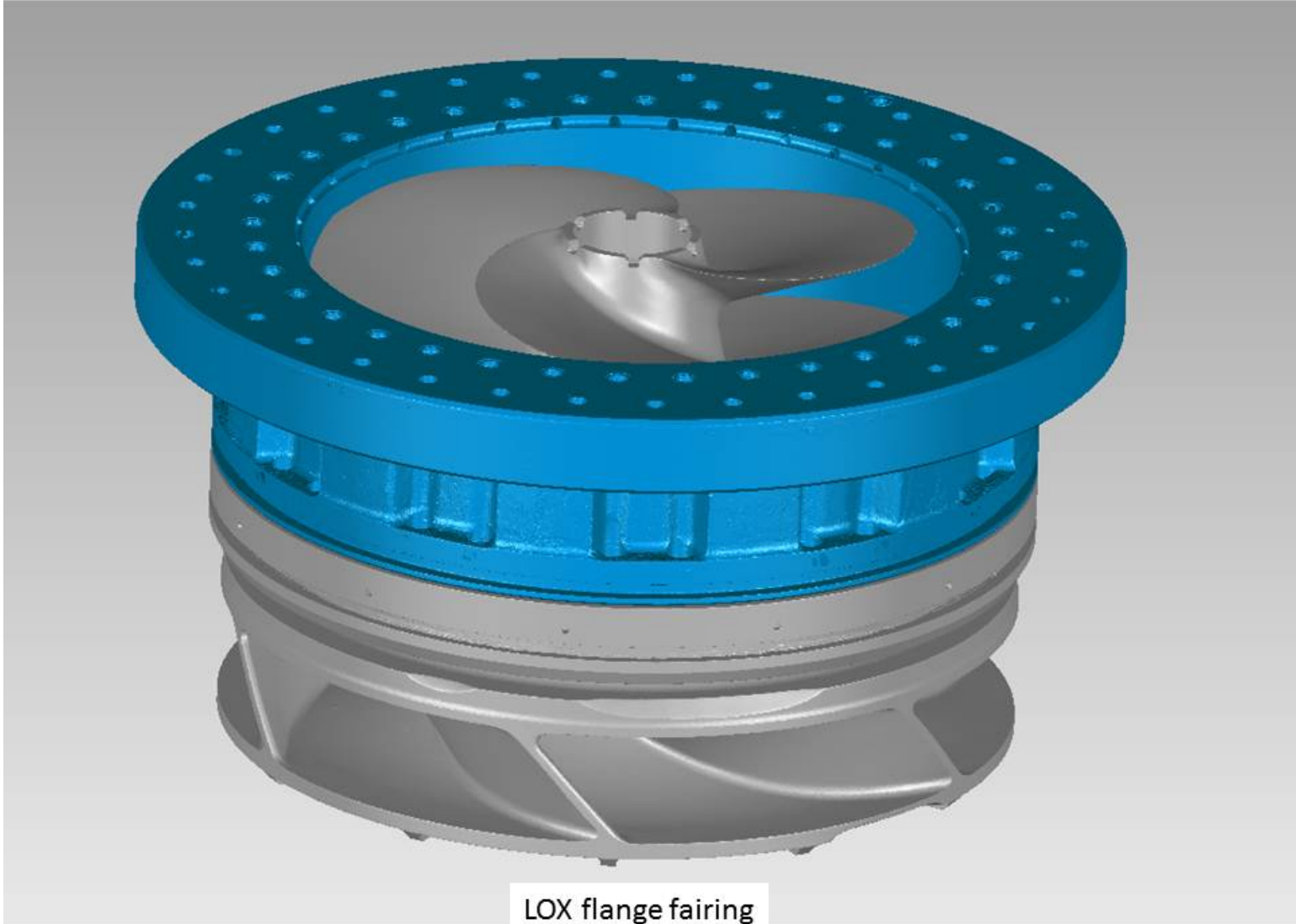
inducer



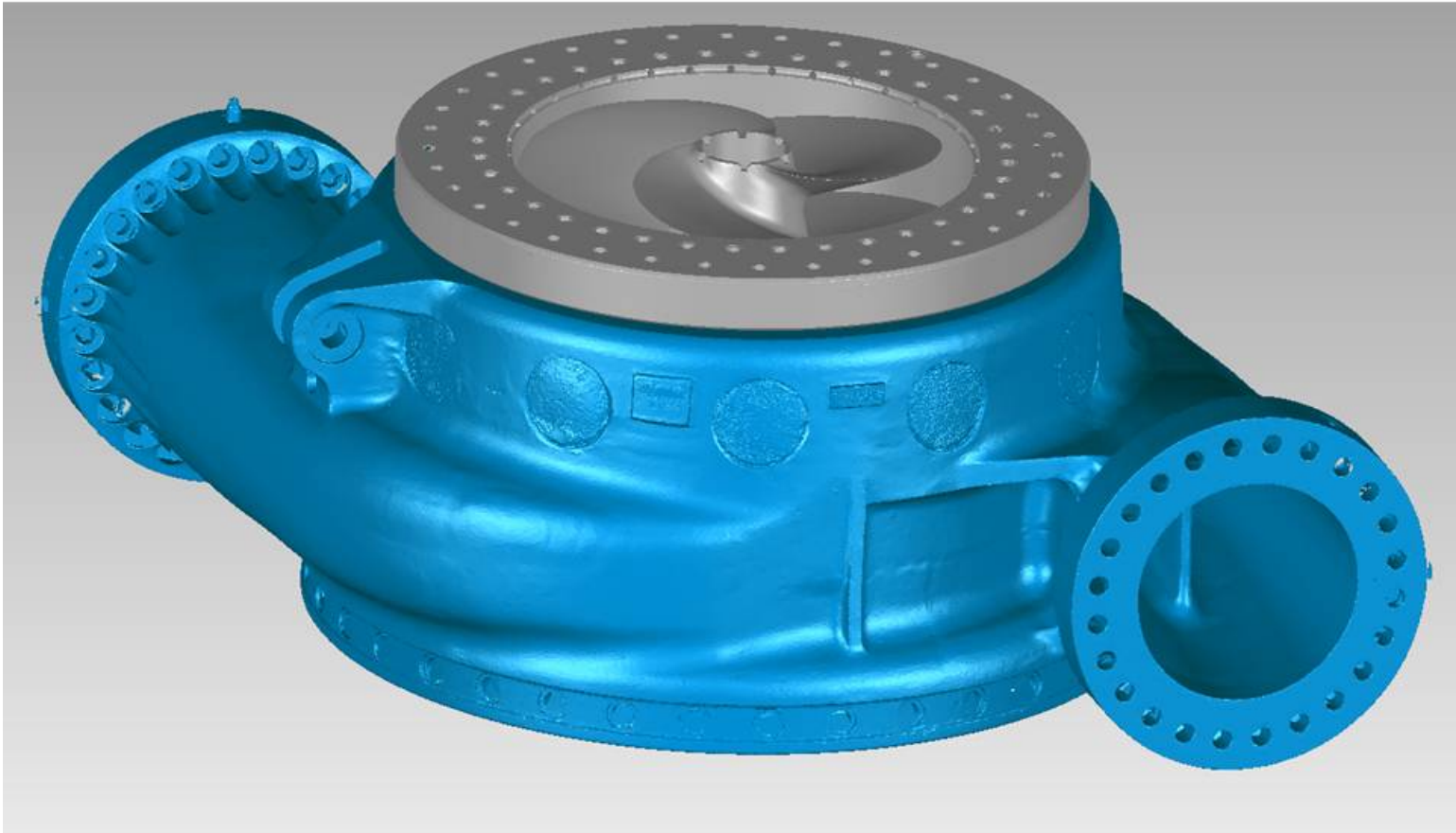
impeller



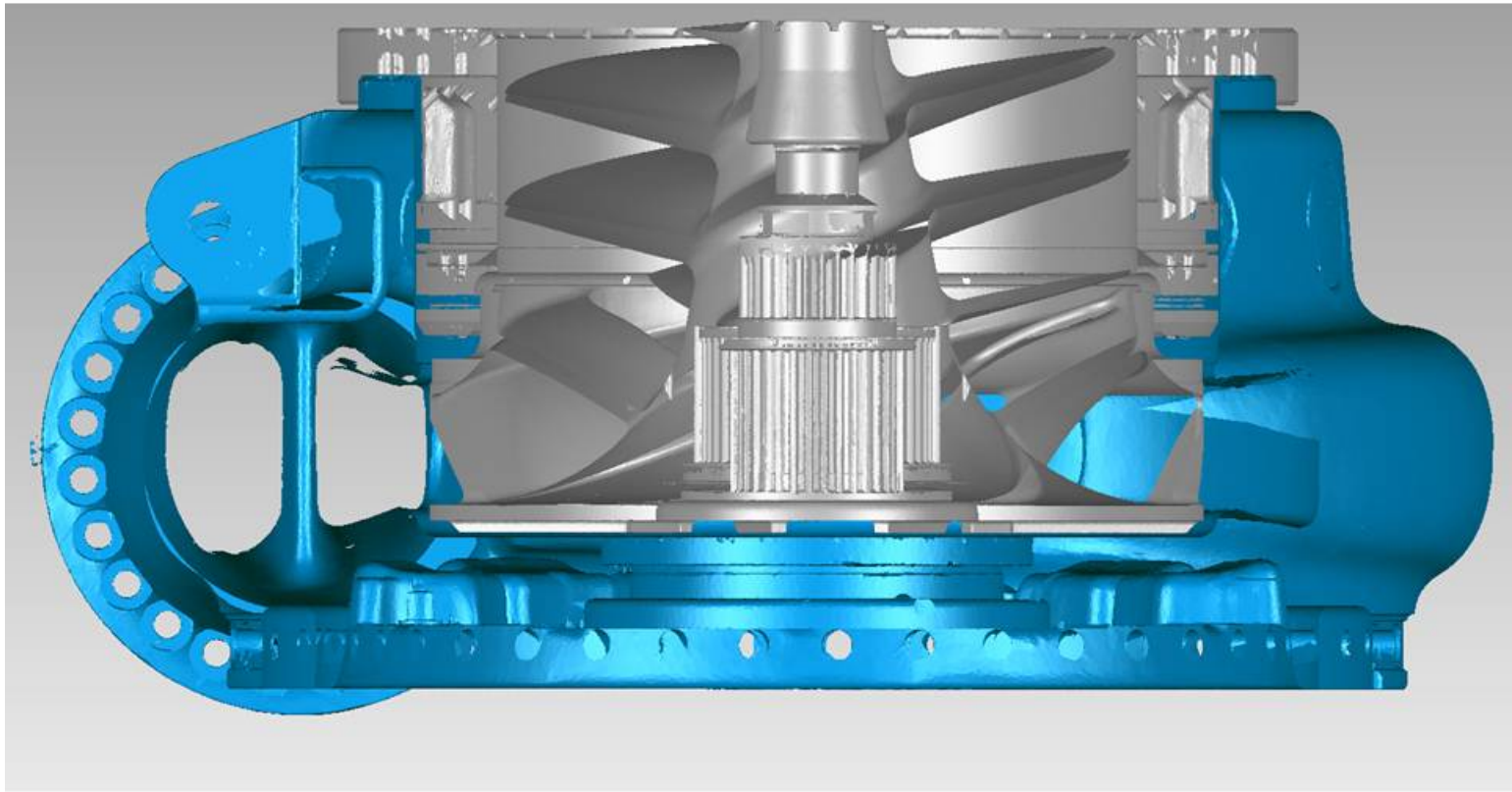
LOX inlet

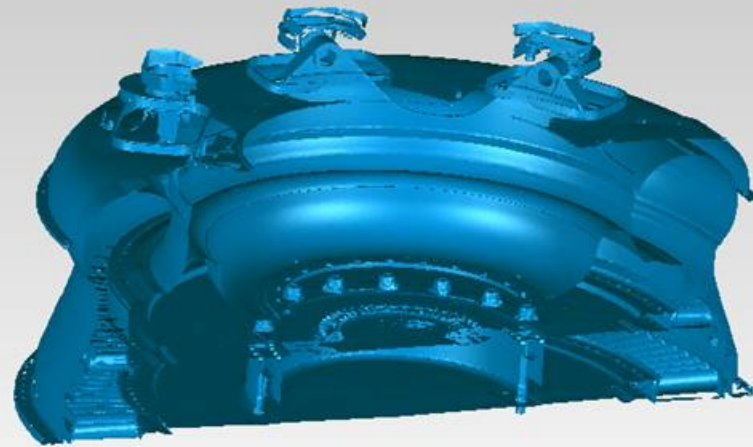


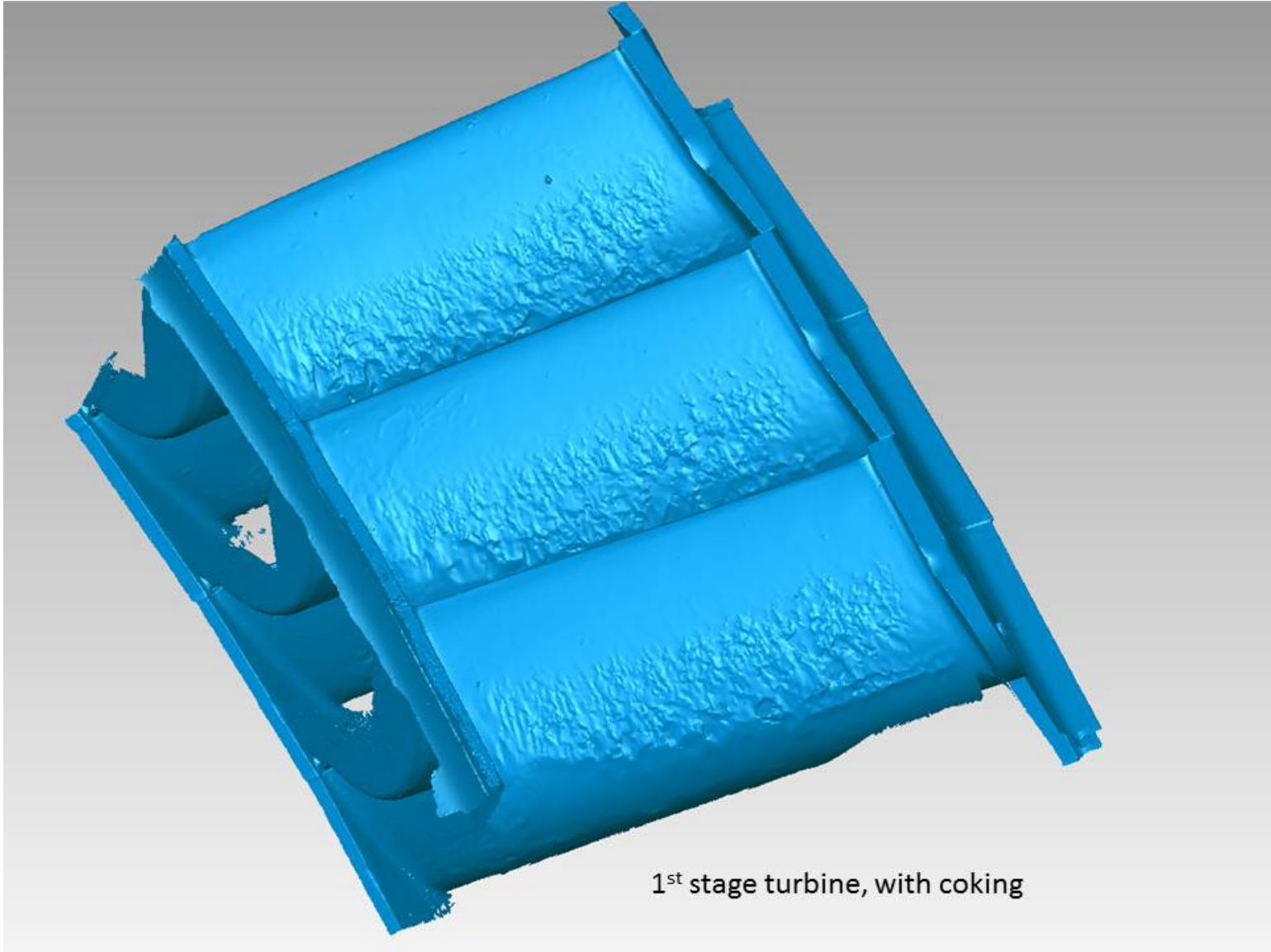
LOX flange fairing



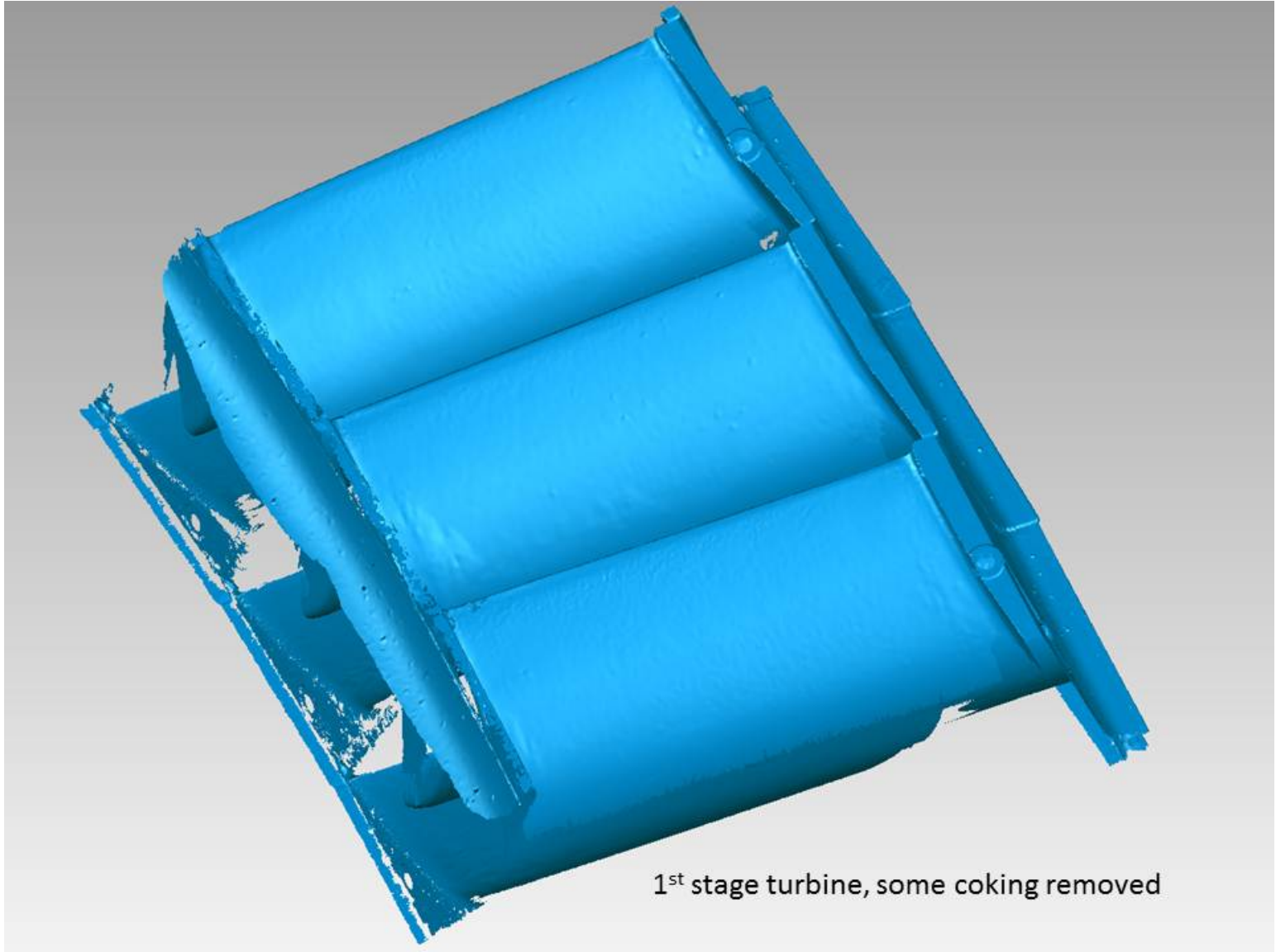
LOX volute



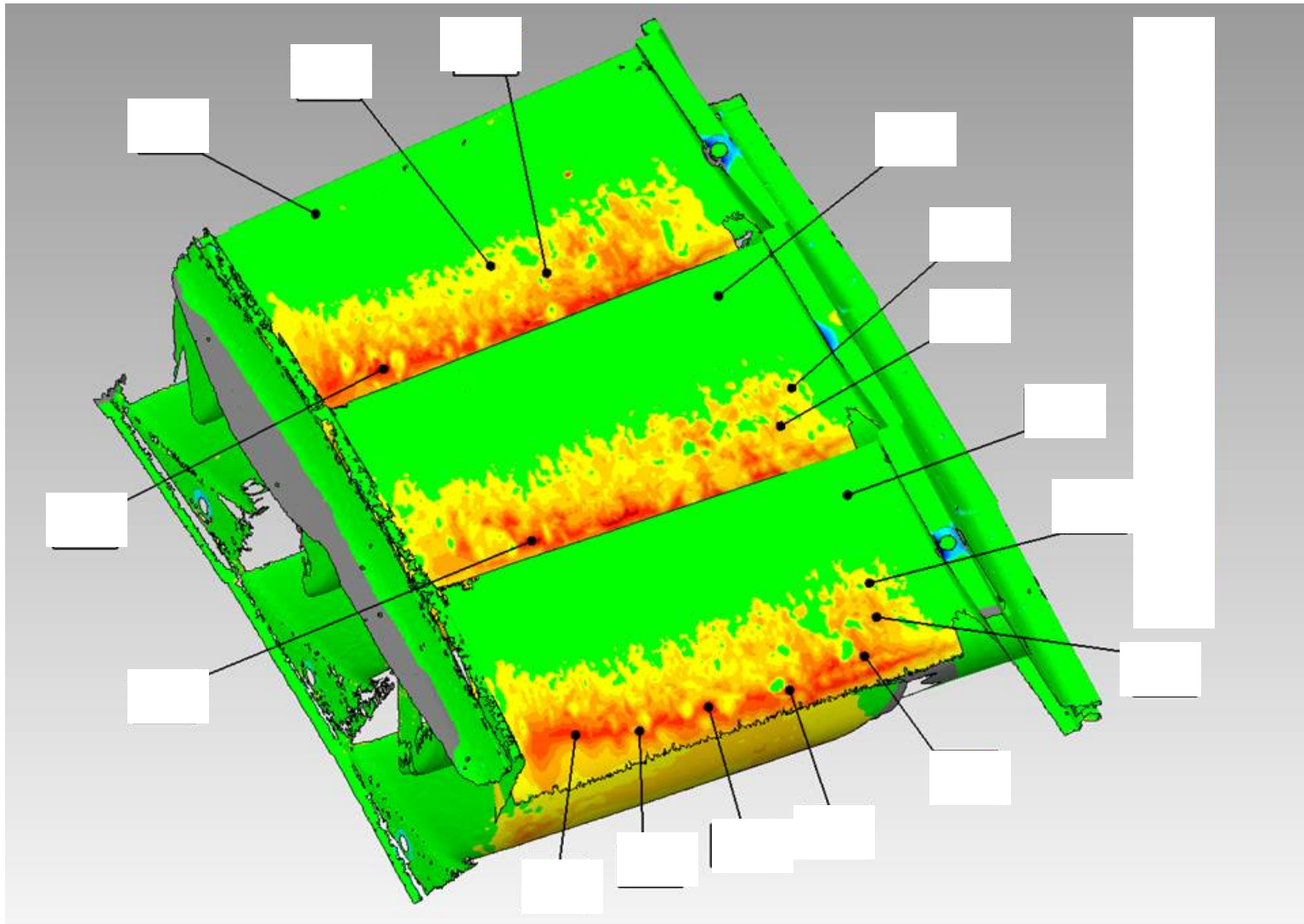




1st stage turbine, with coking



1st stage turbine, some coking removed



1st stage turbine, coke thickness